

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
14 April 2005 (14.04.2005)

PCT

(10) International Publication Number  
**WO 2005/033042 A1**

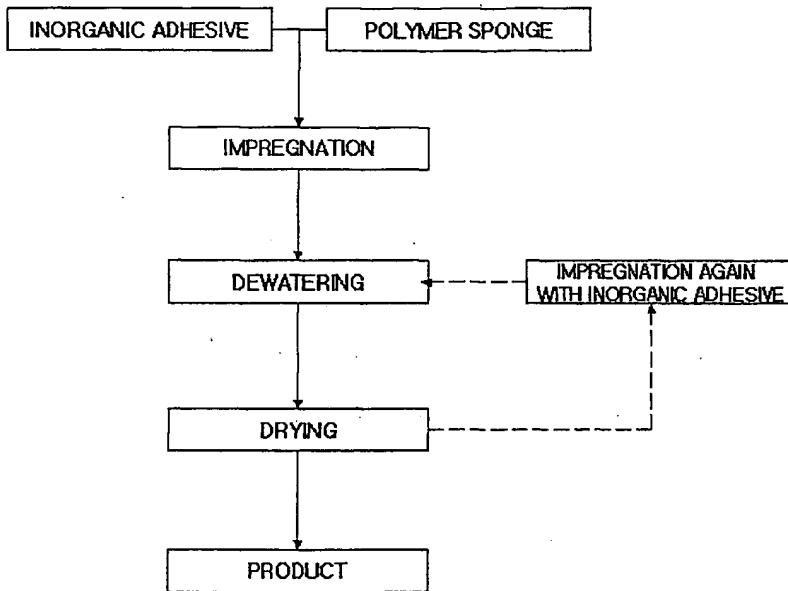
- (51) International Patent Classification<sup>7</sup>: **C04B 38/00, 41/85**
- (74) Agent: KIM, HIJOON; #1604, Honor's Ville, 1380-1, Dunsan-dong, Seo-gu, Daejeon 302-831 (KR).
- (21) International Application Number: **PCT/KR2004/001446**
- (22) International Filing Date: 17 June 2004 (17.06.2004)
- (25) Filing Language: Korean
- (26) Publication Language: English
- (30) Priority Data:  
10-2003-0069407 7 October 2003 (07.10.2003) KR
- (71) Applicant (for all designated States except US): KYUNG-DONG CERATECH CO., LTD. [KR/KR]; 19-5 Baek-seokpo-ri, Yeongin-myeon, Asan-si, Chungcheongnam-do 336-821 (KR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): LEE, Hong-Jae [KR/KR]; #103-1406, Halladongbaek 2 Apt., Sinsang-dong, Cheonan-si, Chungcheongnam-do 330-768 (KR). YU, Gi-Hong [KR/KR]; #202-301, Hansin village, Gajeong 3-dong, Seo-gu, Incheon 404-754 (KR).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

[Continued on next page]

- (54) Title: MANUFACTURING METHOD OF CERAMIC BODY WITH EXCELLENT ADIABATIC CAPACITY



- (57) Abstract: The present invention relates to a porous ceramic body with excellent thermal insulation property. The inventive method comprises: an impregnation step in which a polymer sponge having a three-dimensional porous network structure with open cells is immersed in an inorganic adhesive, such that the polymer sponge is completely impregnated with the inorganic adhesive; a dewatering step in which the inorganic adhesive is partially removed from the polymer sponge impregnated with the inorganic adhesive, such that the polymer sponge contains the inorganic adhesive at a amount selected according to the desired density of the porous ceramic body; and a drying step in which the polymer sponge from which the inorganic adhesive had been partially removed in the dewatering step is dried so as to cure the inorganic adhesive.

**WO 2005/033042 A1**



*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*